

ABSTRACT

A framework and method are disclosed for supporting changed addresses by mobile network nodes. Such support is provided through enhancements to the mobile network nodes and utilizes DNS servers, Dynamic Host Configuration Protocol (DHCP), and virtual private network (VPN) servers -- or their functional equivalents -- to dynamically assign a current network address to a mobile node, provide the current network address to an authoritative name server, and thereafter have correspondent nodes update their addresses for the mobile node based upon an address provided by the authoritative name server. A mobile node registers all of its name-to-address mappings with its authoritative DNS server using a time to live of zero. Furthermore, when a mobile node moves outside its home security domain, the mobile node initiates a virtual private network connection to a virtual private server for a security domain.